Title: **METHOD AND SYSTEM OF UNIFYING DATA**
Inventors Name: Shlaes, et al.
Attorney Docket Number: 23688/04164

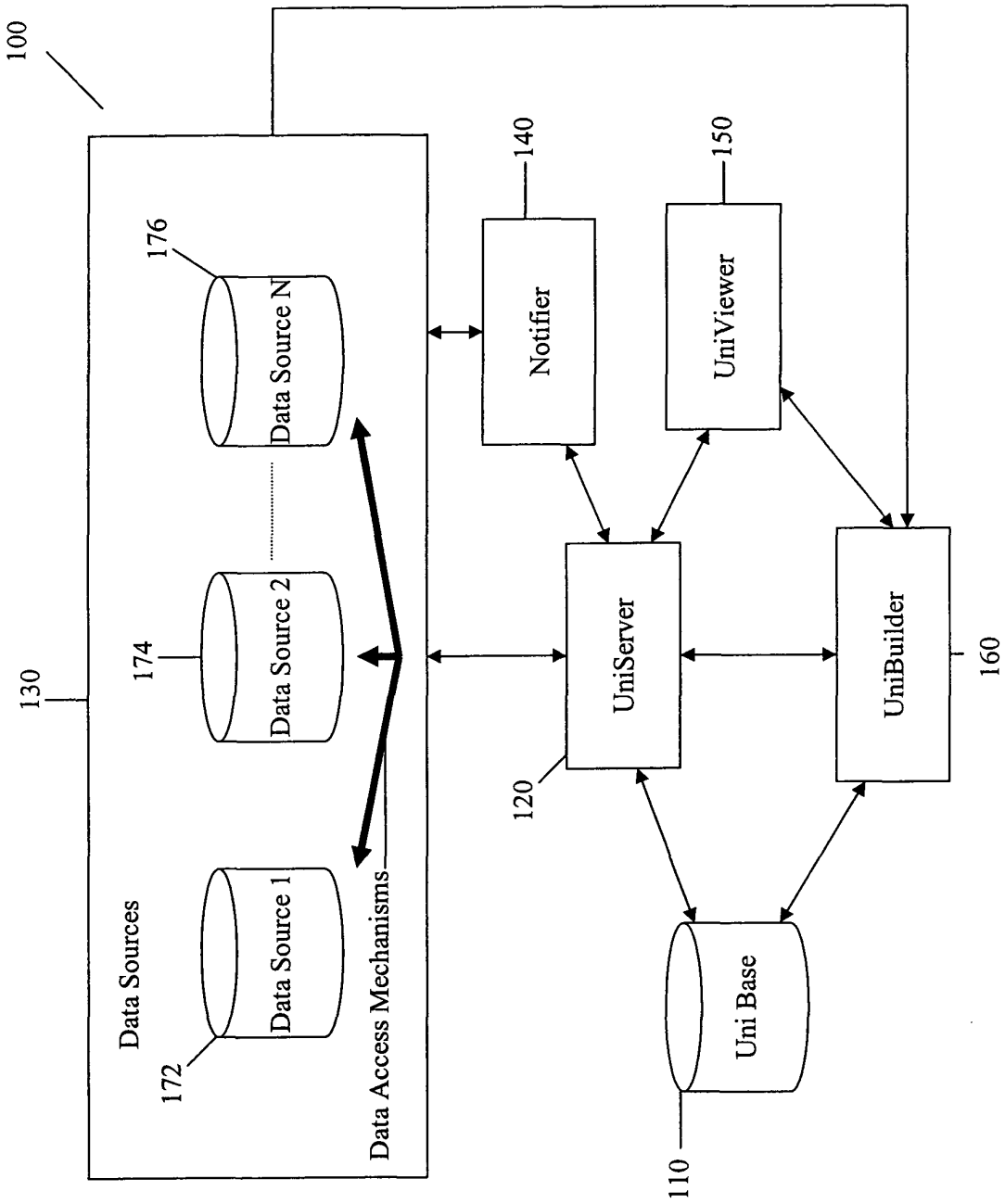


Fig. 1

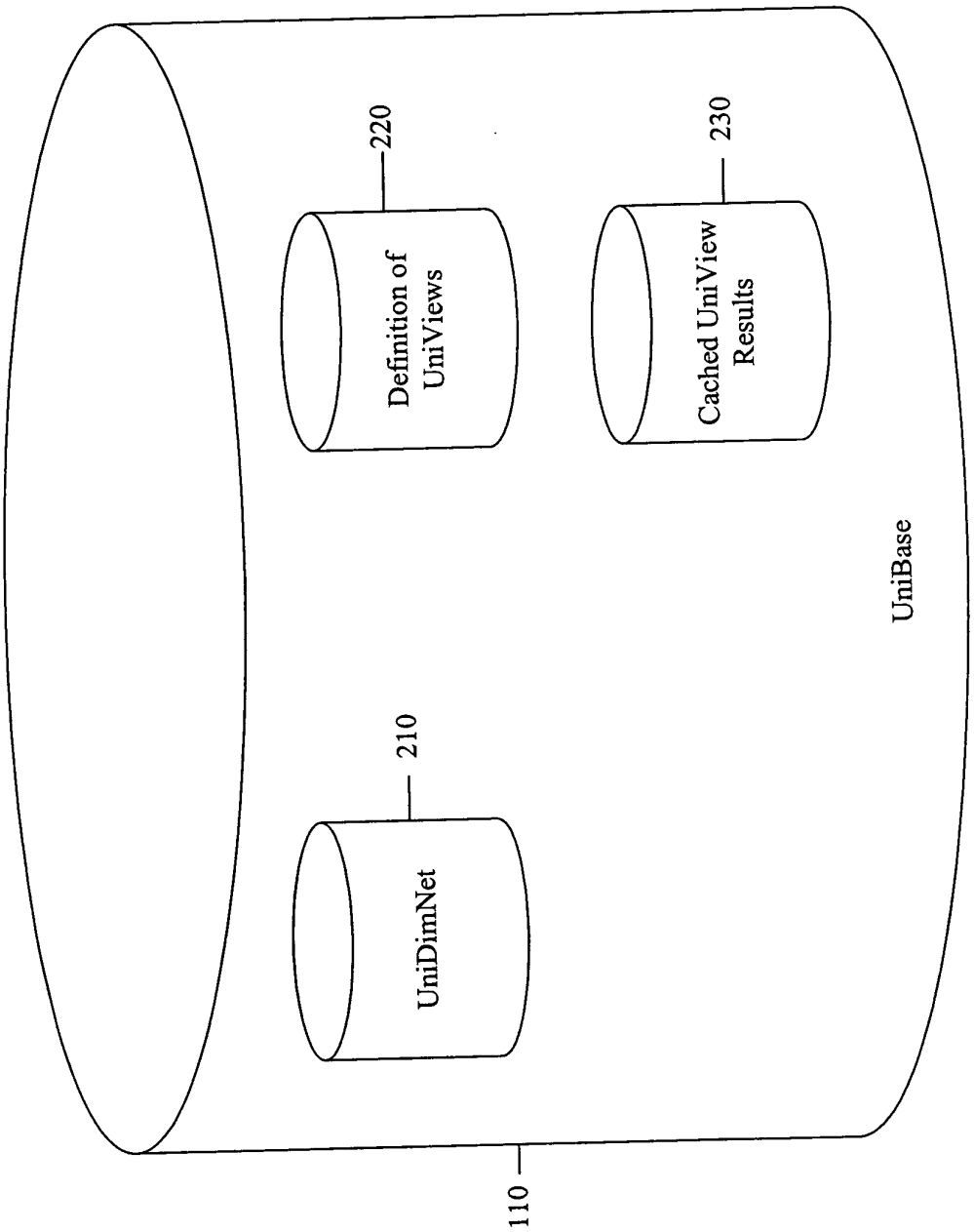

220
Definition of UniViews
230
Cached UniView Results
UniBase
210
UniDimNet
110

Fig. 2

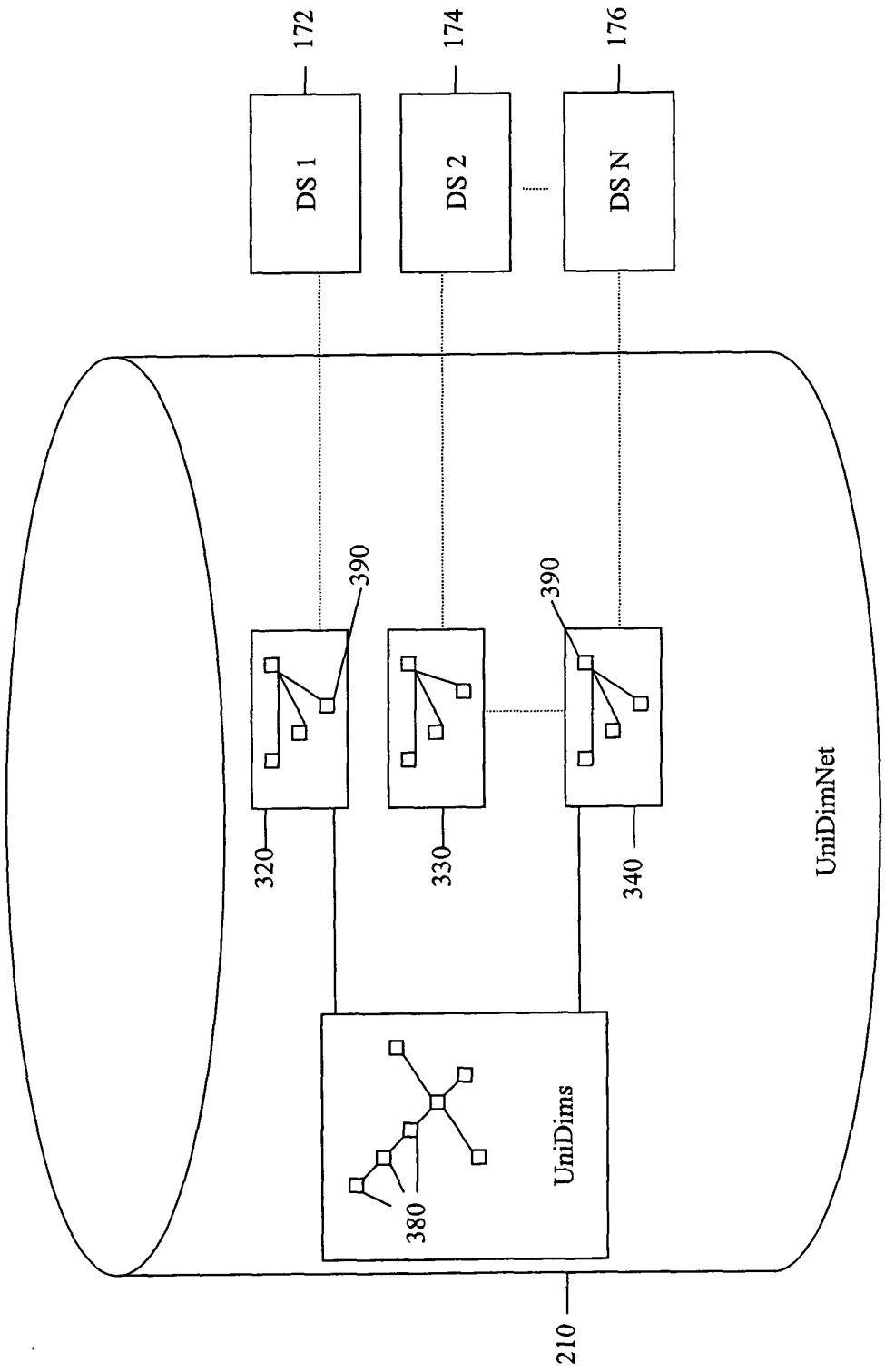

172
174
176
DS 1
DS 2
DS N
390
390
320
330
340
UniDimNet
UniDims
380
210

Fig. 3

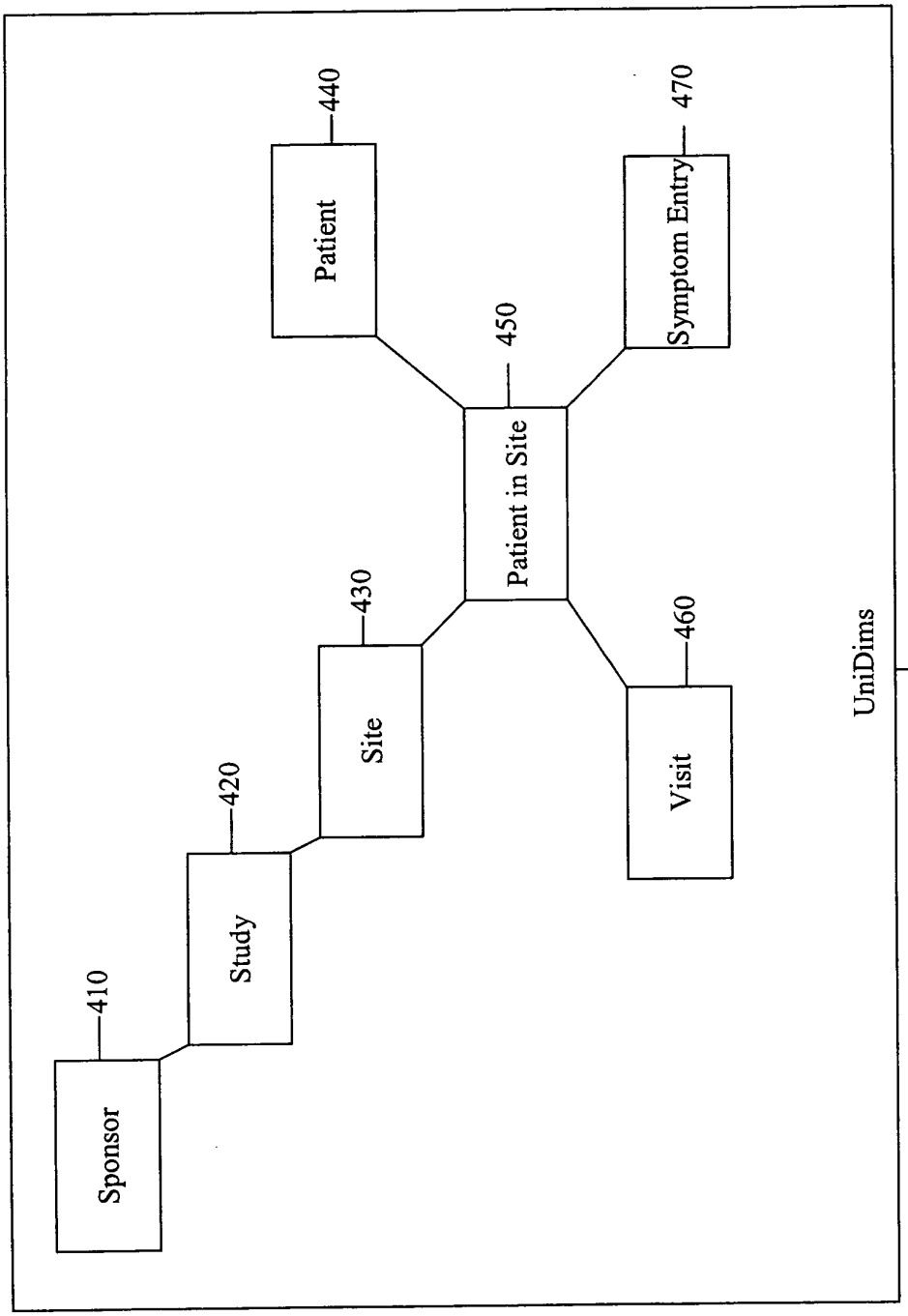

Sponsor
410
Study
420
Site
430
Patient in Site
450
Patient
440
Symptom Entry
470
Visit
460
UniDims
310

Fig. 4

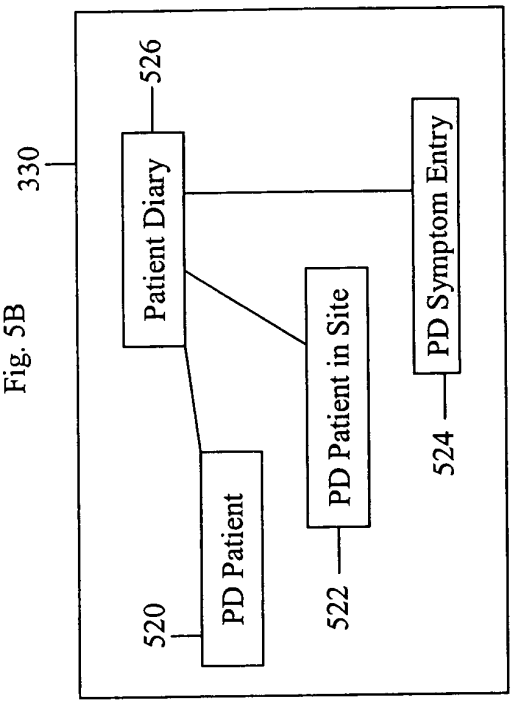


Fig. 5B

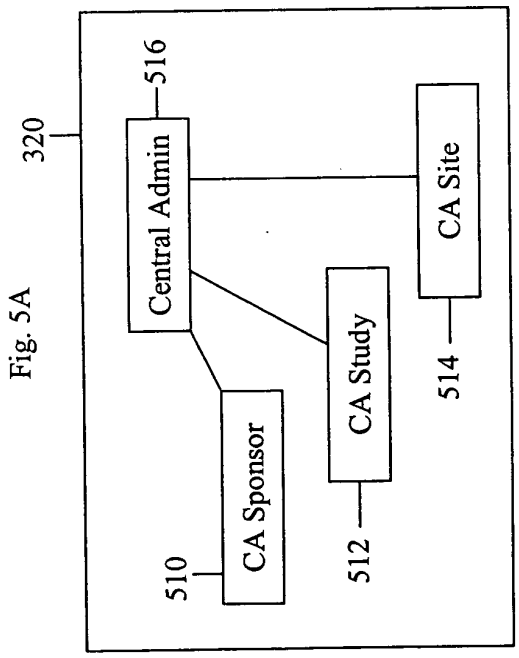


Fig. 5A

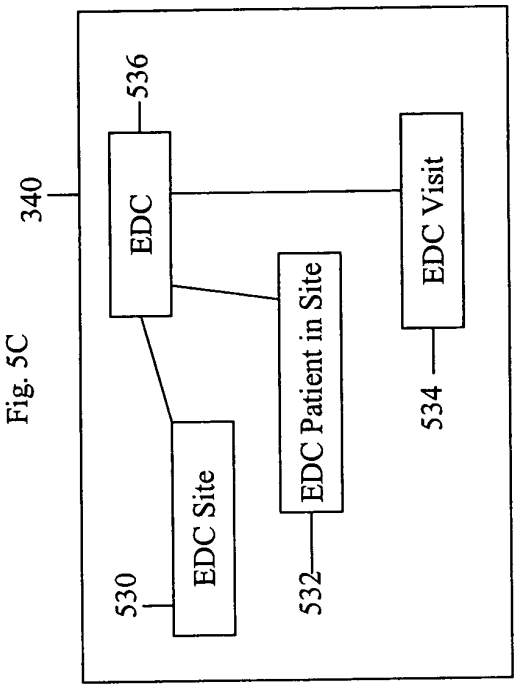


Fig. 5C

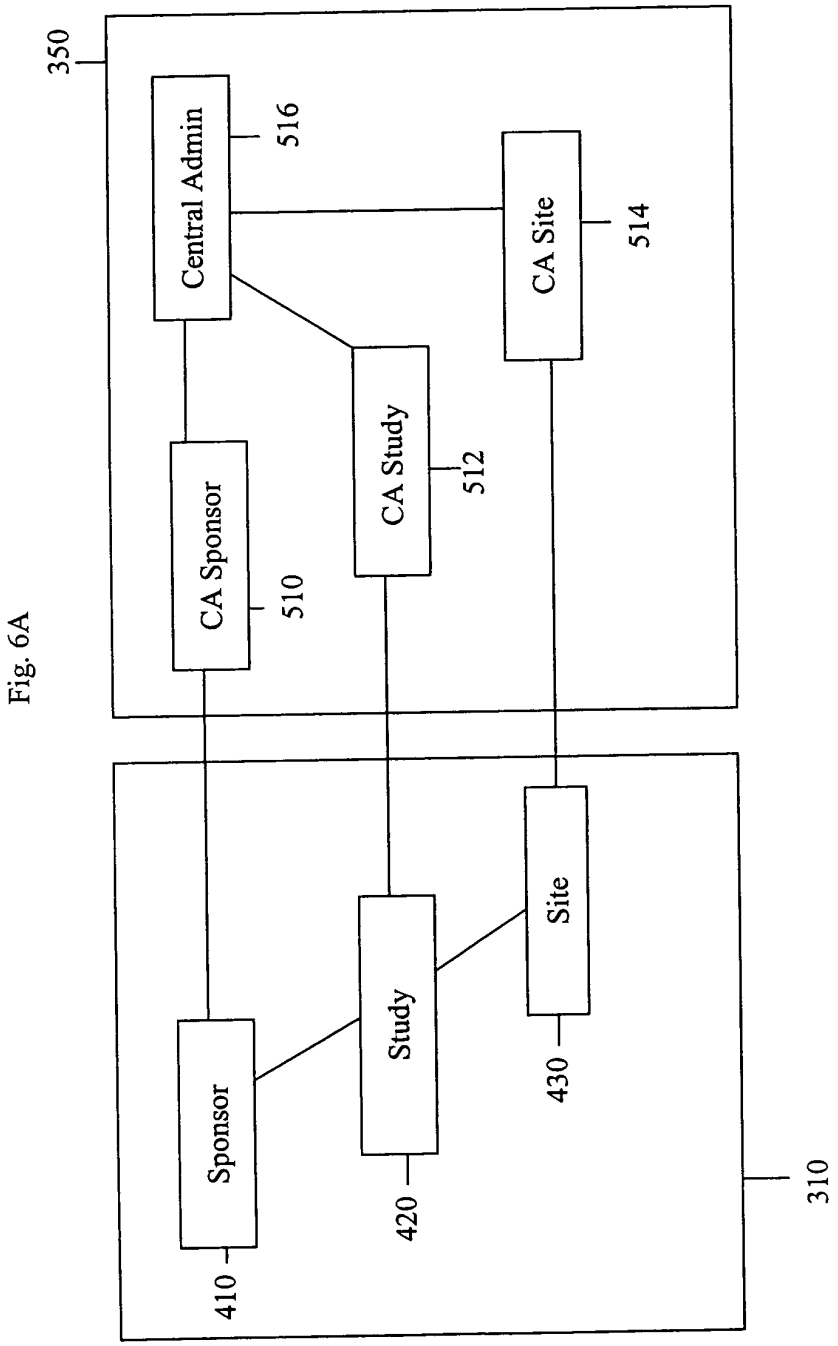

350
Central Admin
516
CA Site
514
CA Study
512
CA Sponsor
510
Sponsor
Study
Site
410
420
430
310

Fig. 6A

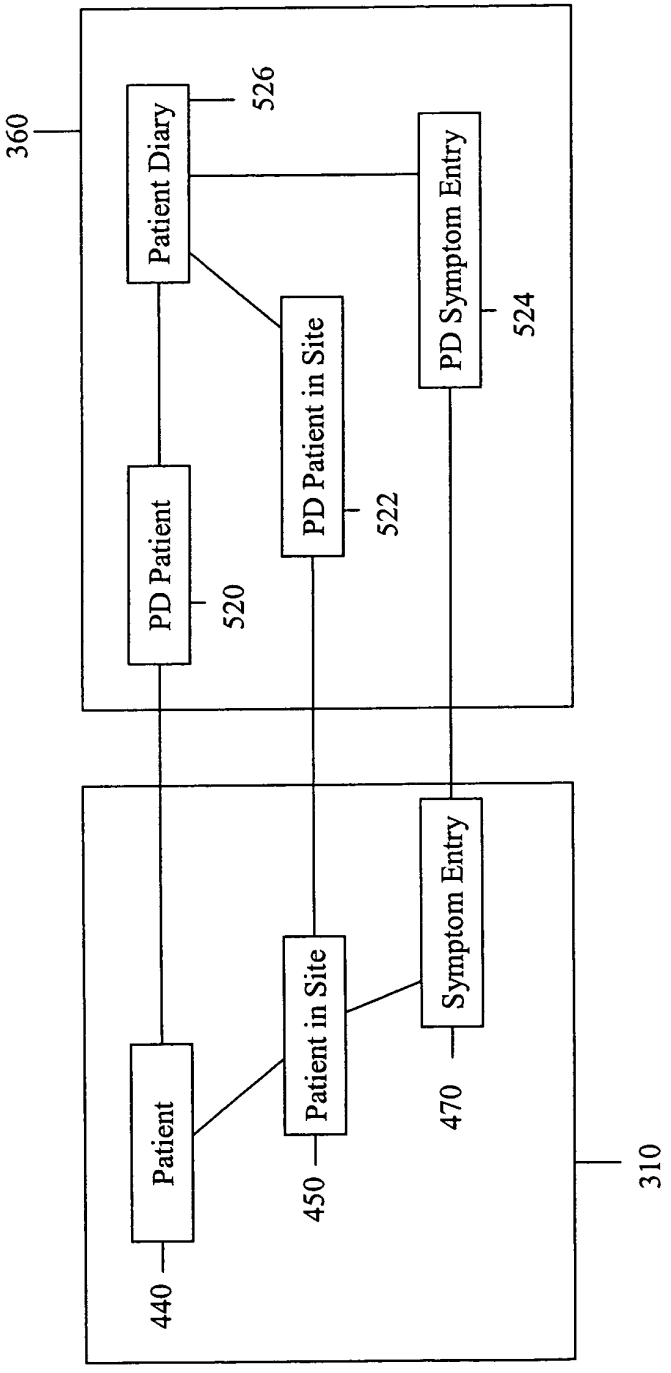

360
Patient Diary
526
PD Symptom Entry
524
PD Patient in Site
522
PD Patient
520
Patient
440
Patient in Site
450
Symptom Entry
470
310

Fig. 6B

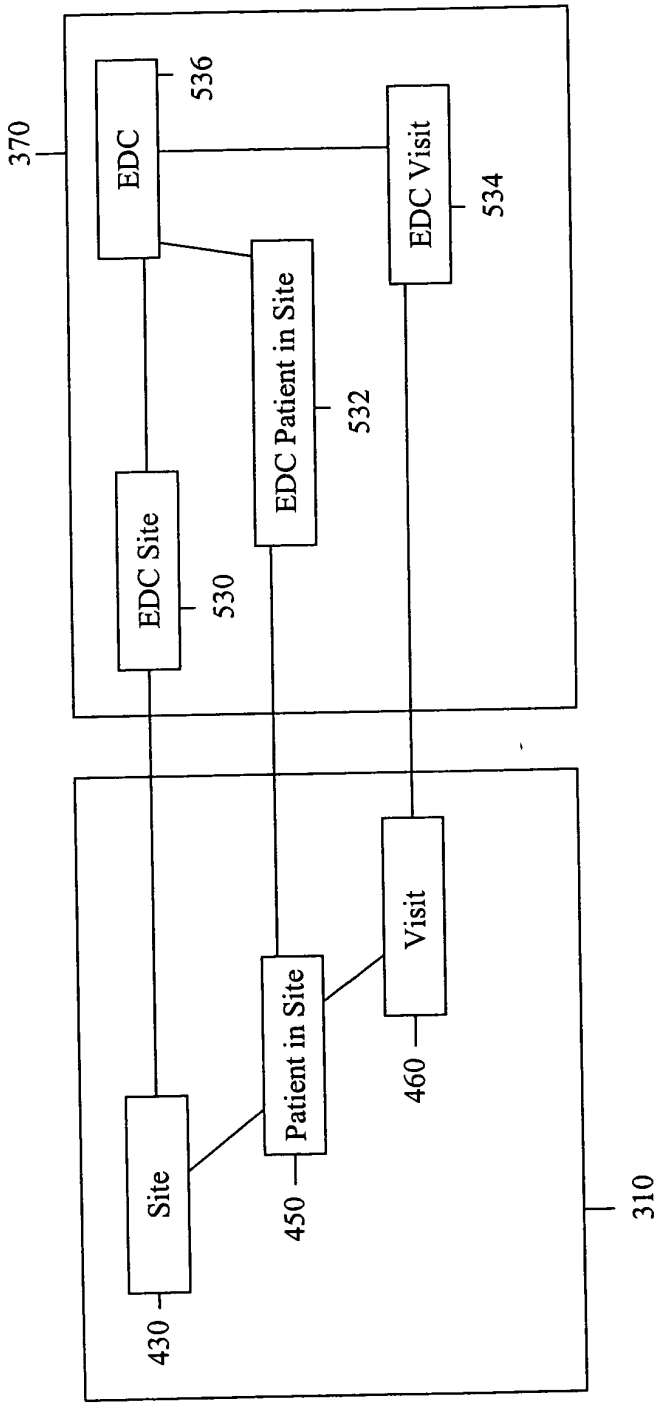

370
EDC
536
EDC Visit
534
EDC Patient in Site
532
EDC Site
530
Visit
460
Patient in Site
450
Site
430
310

Fig. 6C

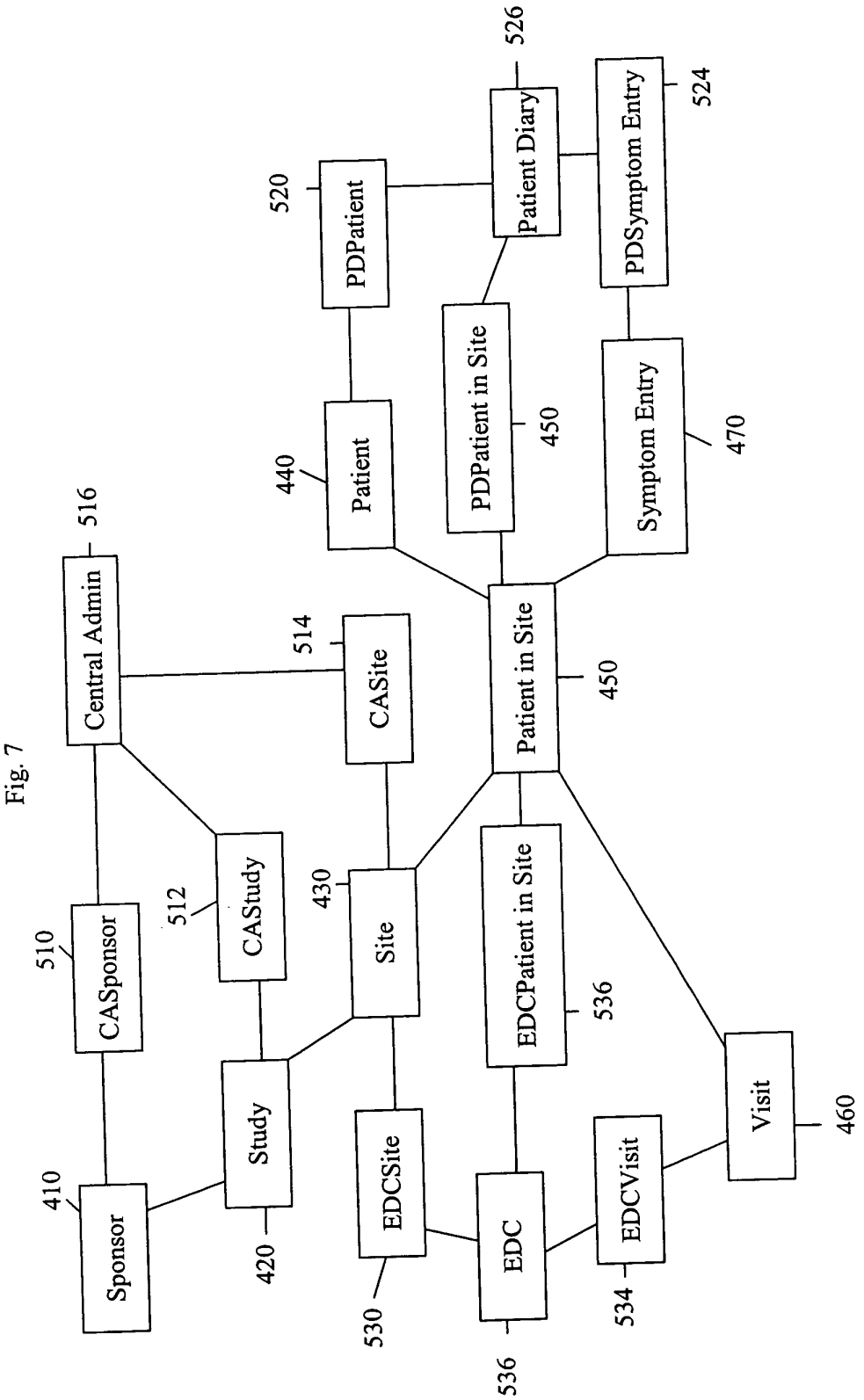

Central Admin
516
CASponsor
510
Sponsor
410
CAStudy
512
Study
420
CASite
514
Site
430
Patient
440
PDPatient
520
Patient Diary
526
PDSymptom Entry
524
PDPatient in Site
450
Symptom Entry
470
Patient in Site
450
EDCPatient in Site
536
EDCSite
530
EDC
536
EDCVisit
534
Visit
460

Fig. 7

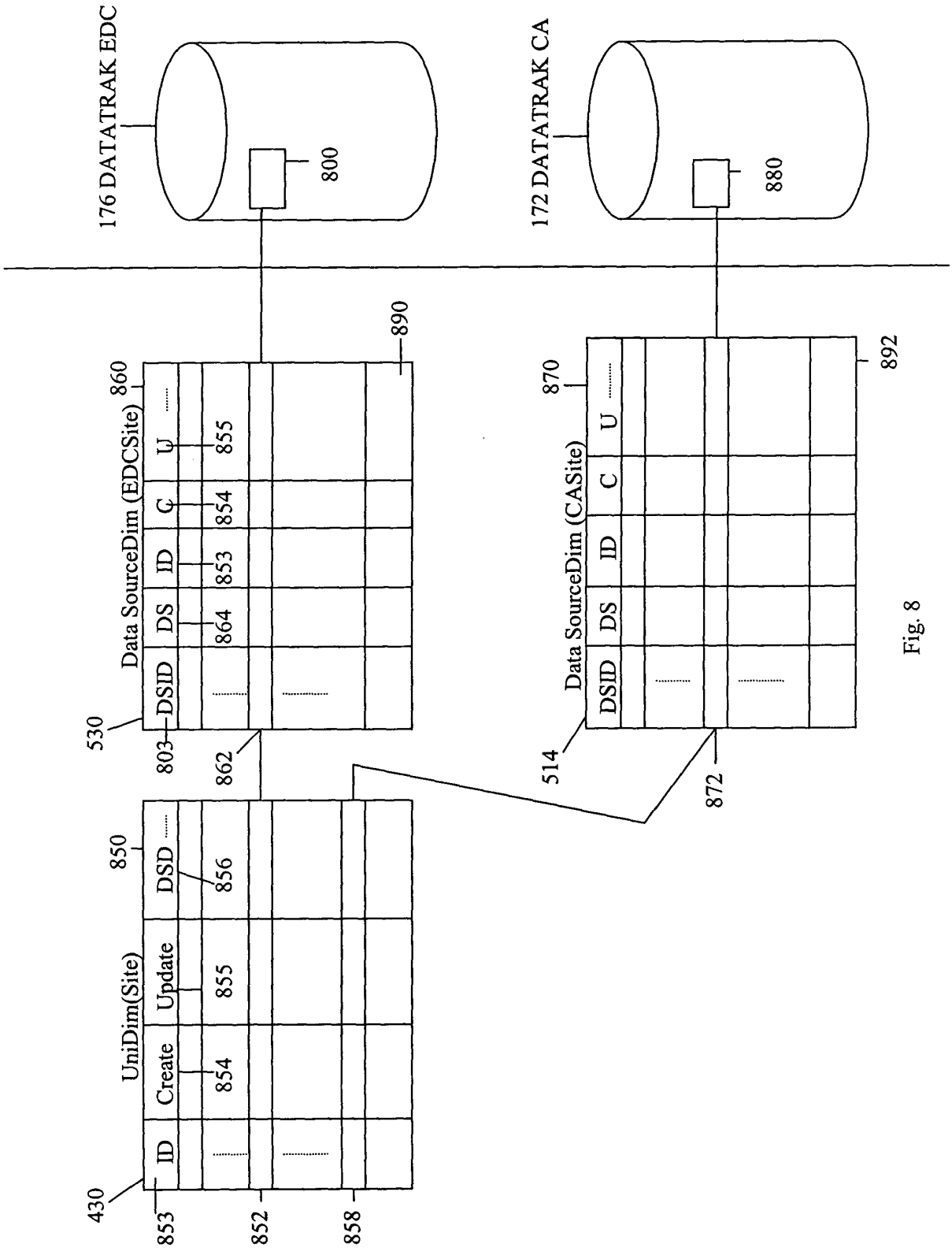

176 DATATRAK EDC
800
172 DATATRAK CA
880
890
892
860
870
Data SourceDim (EDCSite)
Data SourceDim (CASite)
DSID
DS
ID
C
U
855
854
853
864
530
803
862
514
872
850
UniDim(Site)
DSD
Update
Create
ID
856
855
854
853
852
858
430

Fig. 8

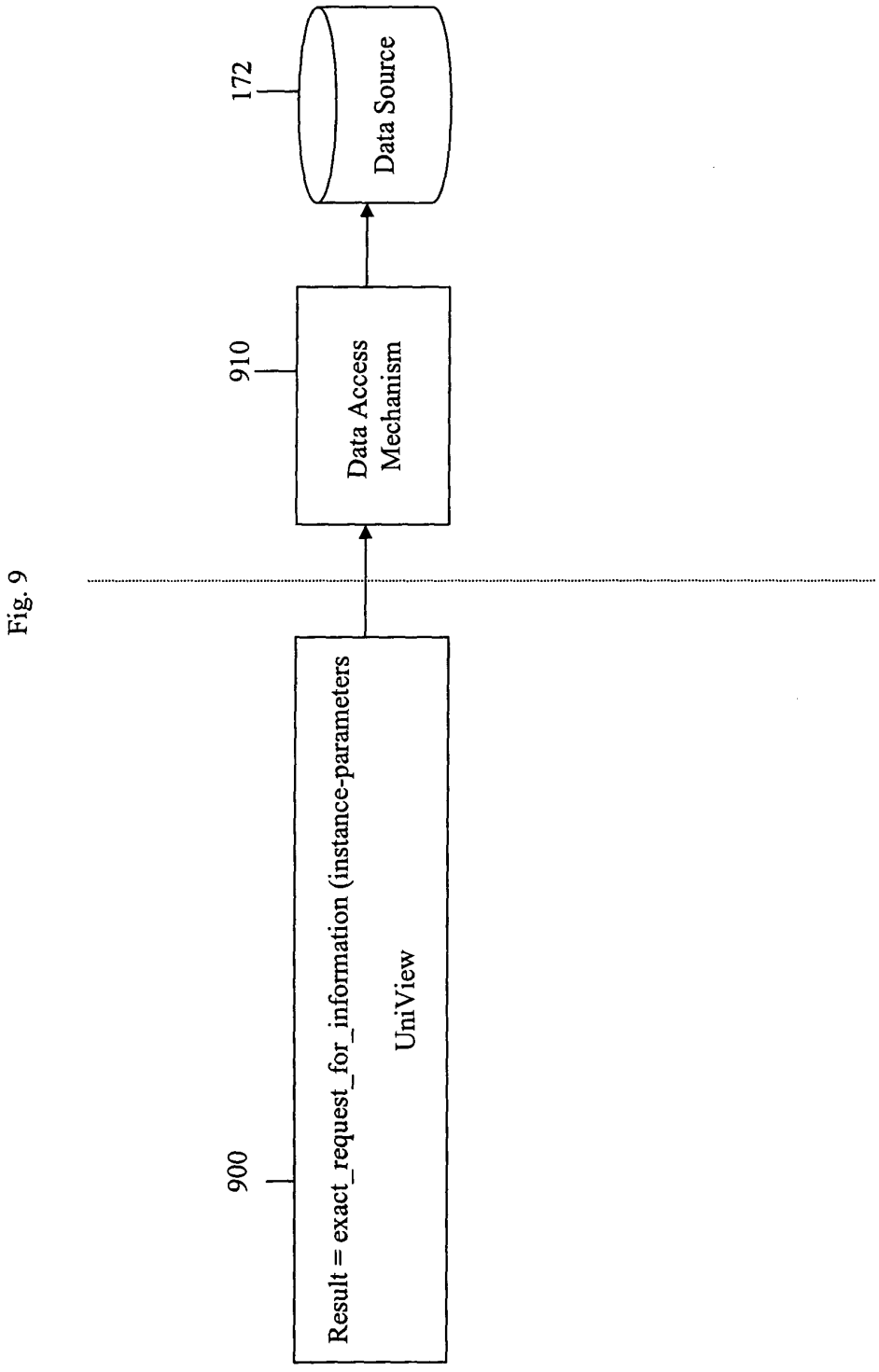

172
Data Source
910
Data Access Mechanism
900
Result = exact_request_for_information (instance-parameters
UniView

Fig. 9

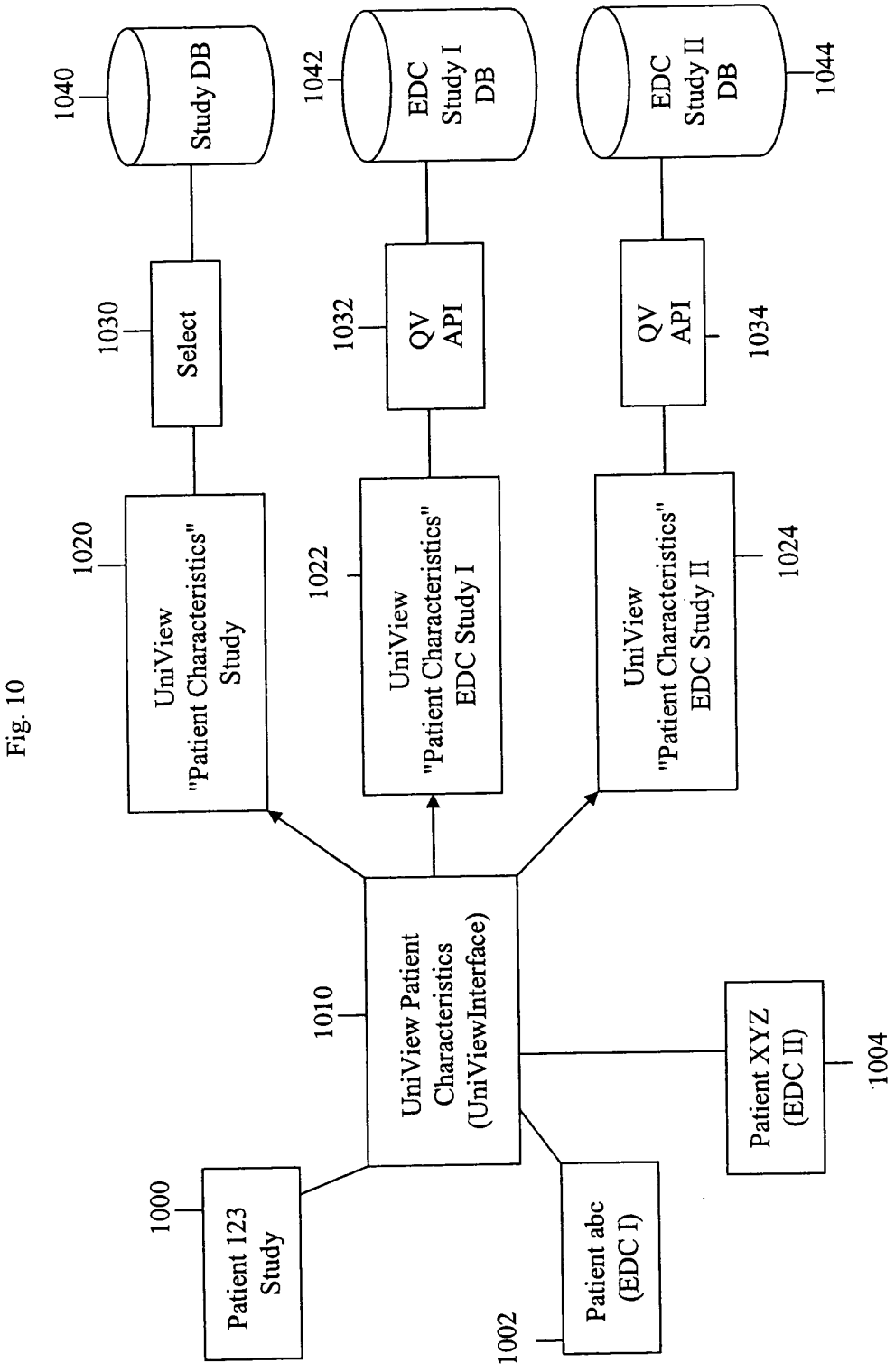
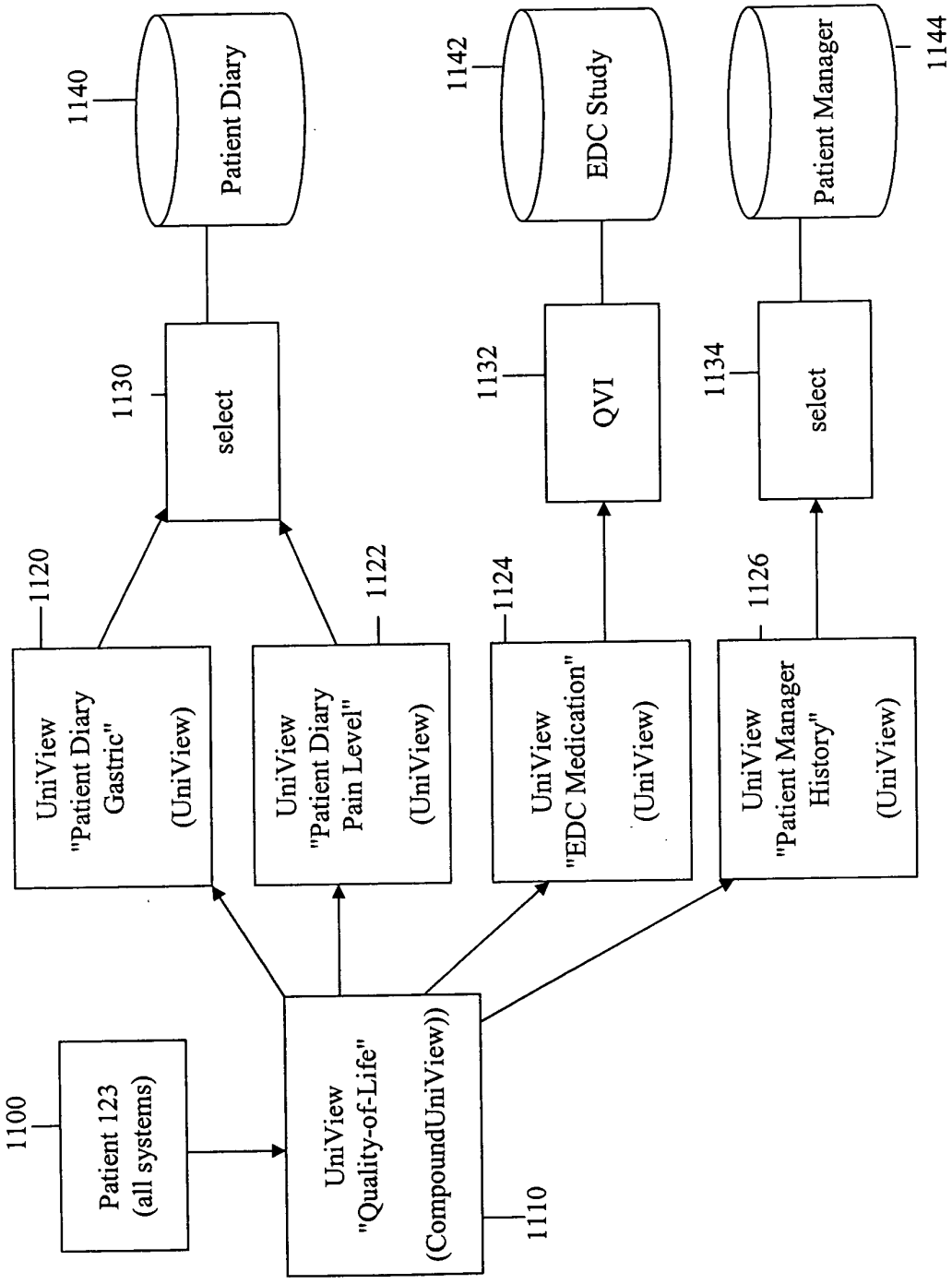

Patient 123 Study
1000
Patient abc (EDC I)
1002
UniView Patient Characteristics (UniViewInterface)
1010
Patient XYZ (EDC II)
1004
UniView "Patient Characteristics" Study
1020
UniView "Patient Characteristics" EDC Study I
1022
UniView "Patient Characteristics" EDC Study II
1024
Select
1030
QV API
1032
QV API
1034
Study DB
1040
EDC Study I DB
1042
EDC Study II DB
1044

Fig. 10

Fig. 11


1100
Patient 123
(all systems)
UniView
"Quality-of-Life"
(CompoundUniView))
1110
1120
UniView
"Patient Diary
Gastric"
(UniView)
1122
UniView
"Patient Diary
Pain Level"
(UniView)
1124
UniView
"EDC Medication"
(UniView)
1126
UniView
"Patient Manager
History"
(UniView)
1130
select
1132
QVI
1134
select
1140
Patient Diary
1142
EDC Study
1144
Patient Manager

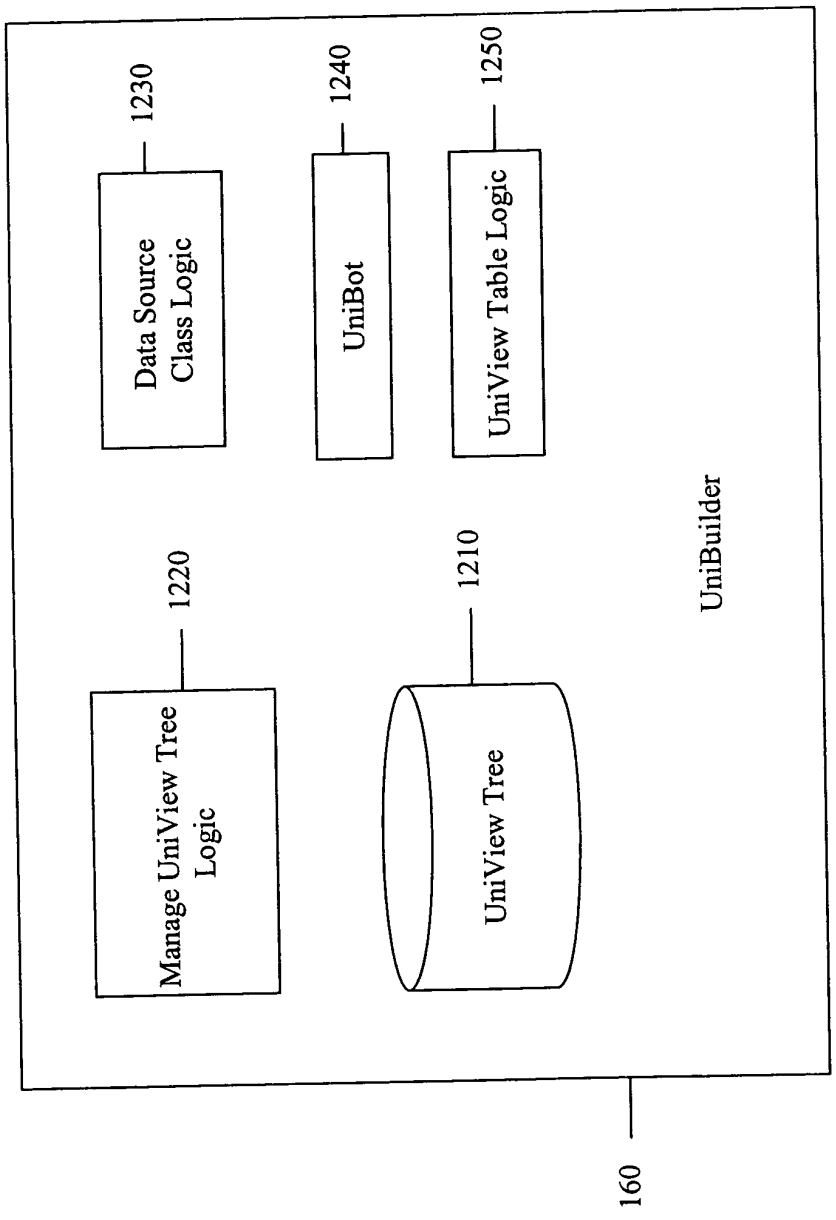
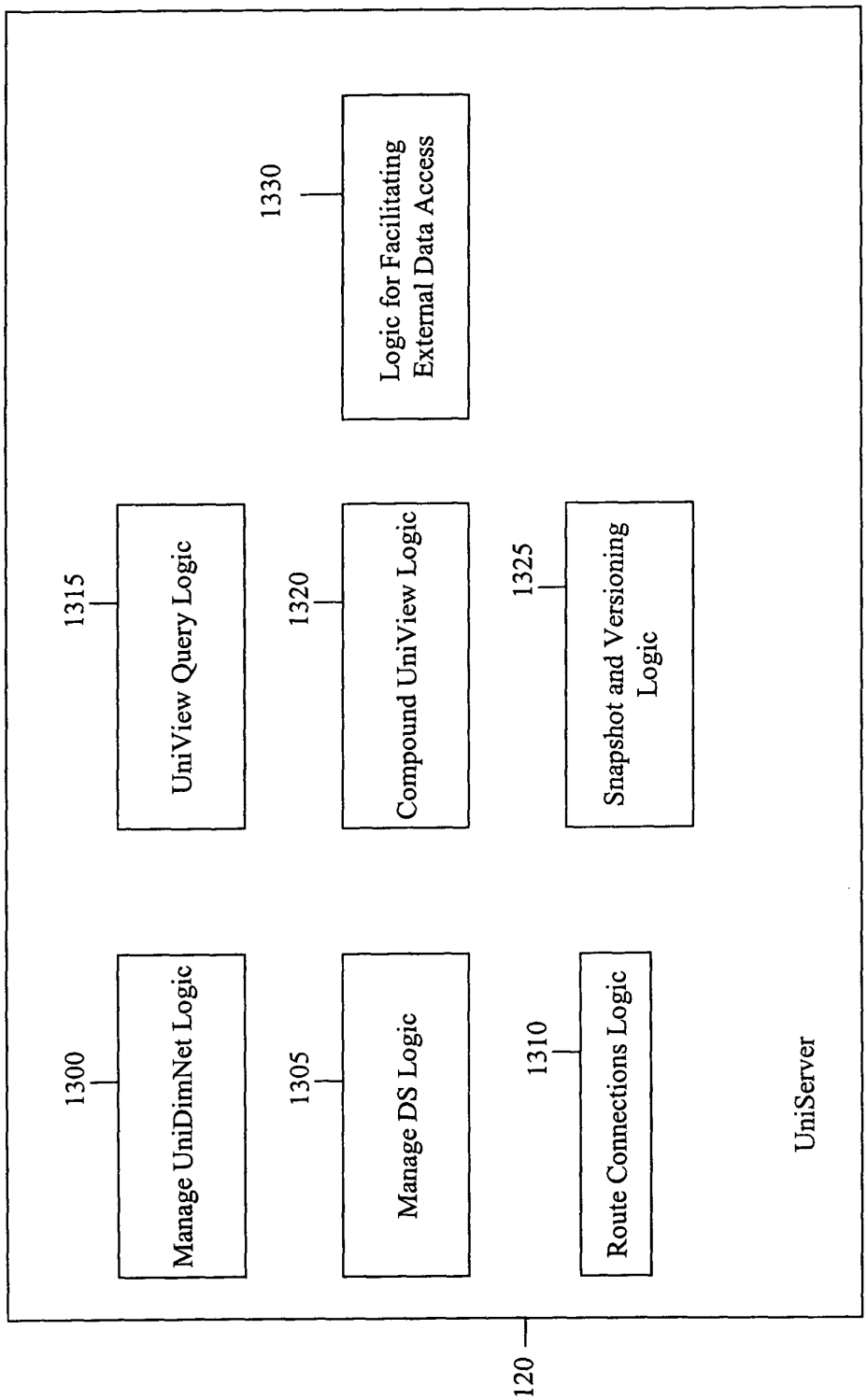

1230
Data Source Class Logic
1240
UniBot
1250
UniView Table Logic
1220
Manage UniView Tree Logic
1210
UniView Tree
UniBuilder
160

Fig. 12

Fig. 13


UniServer
120
Manage UniDimNet Logic
1300
Manage DS Logic
1305
Route Connections Logic
1310
UniView Query Logic
1315
Compound UniView Logic
1320
Snapshot and Versioning Logic
1325
Logic for Facilitating External Data Access
1330

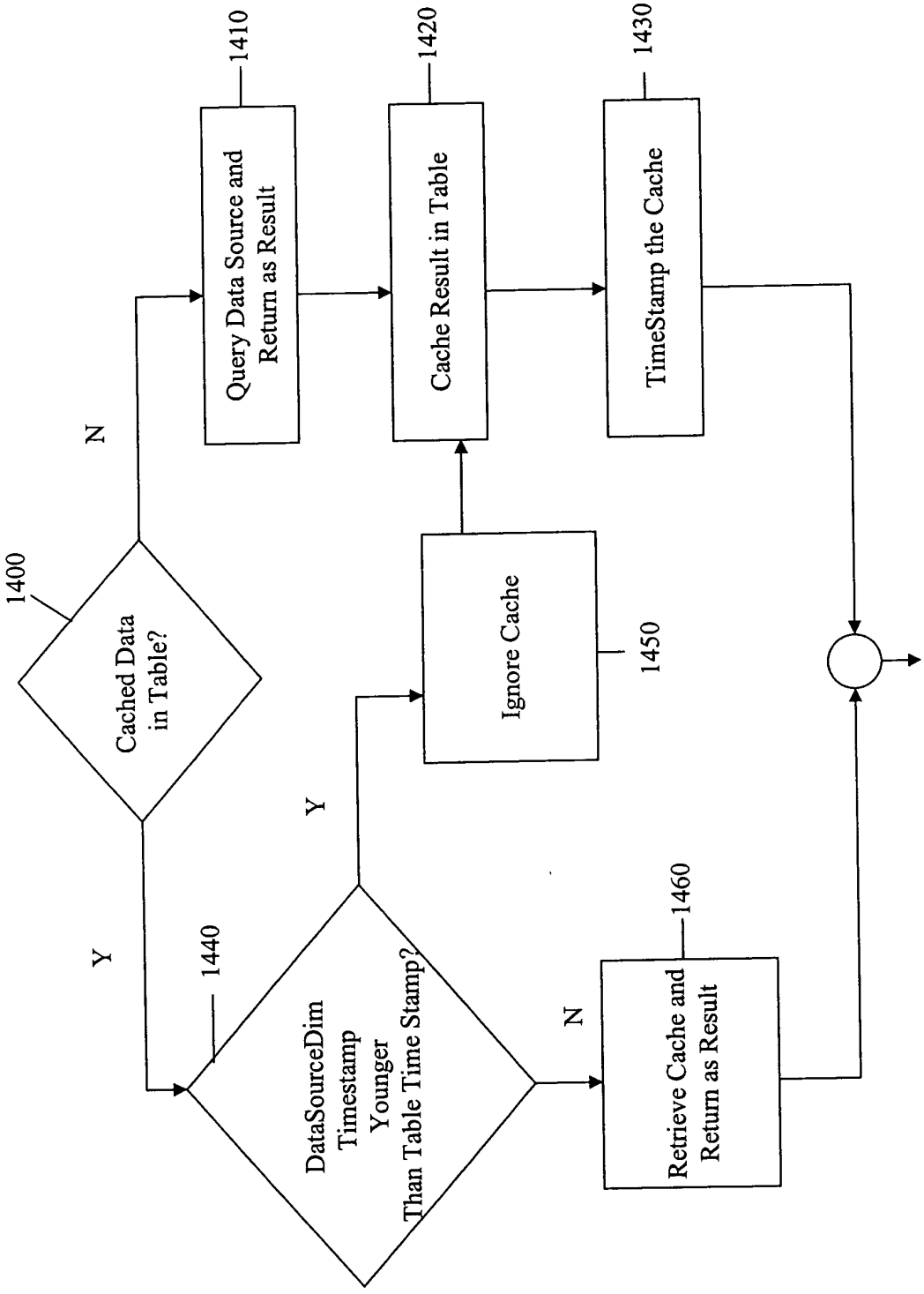

1400
Cached Data in Table?
N
Y
1410
Query Data Source and Return as Result
1420
Cache Result in Table
1430
TimeStamp the Cache
1440
DataSourceDim Timestamp Younger Than Table Time Stamp?
Y
N
1450
Ignore Cache
1460
Retrieve Cache and Return as Result

Fig. 14

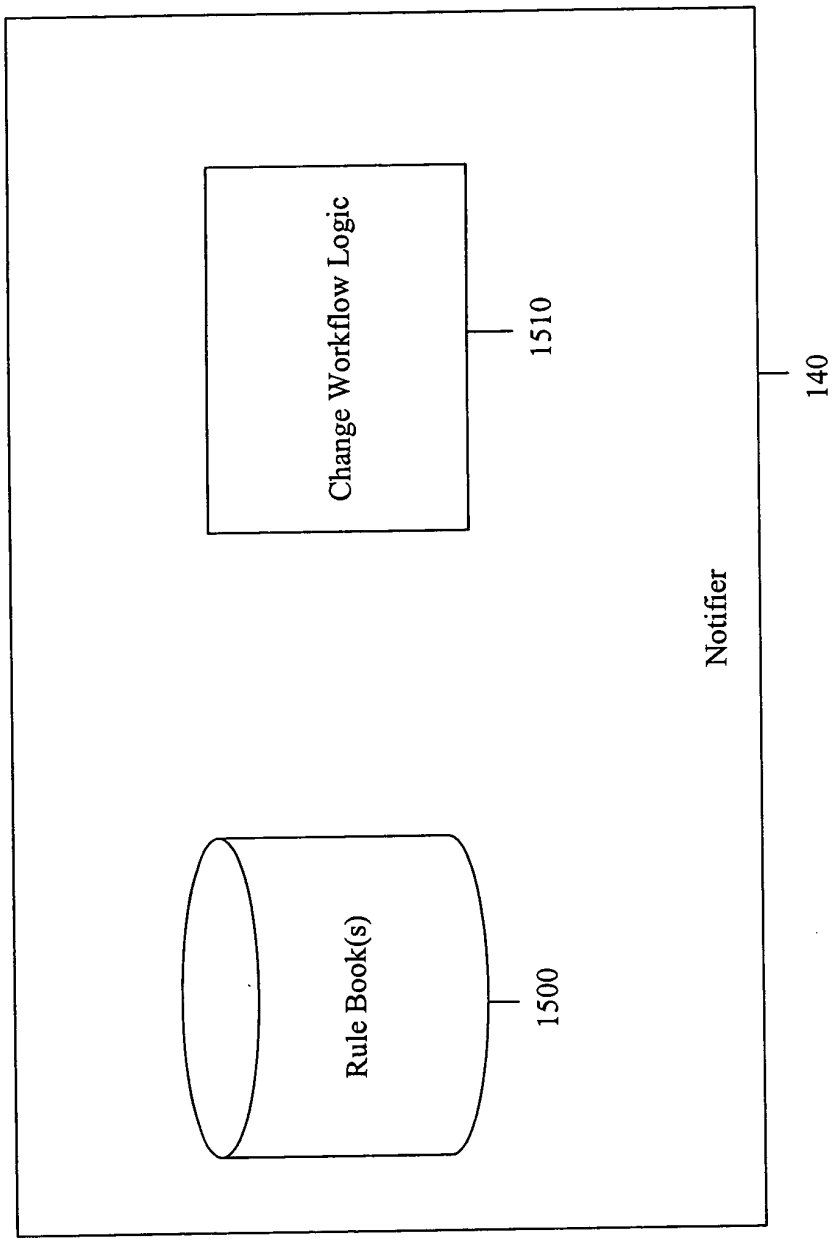


Fig. 15

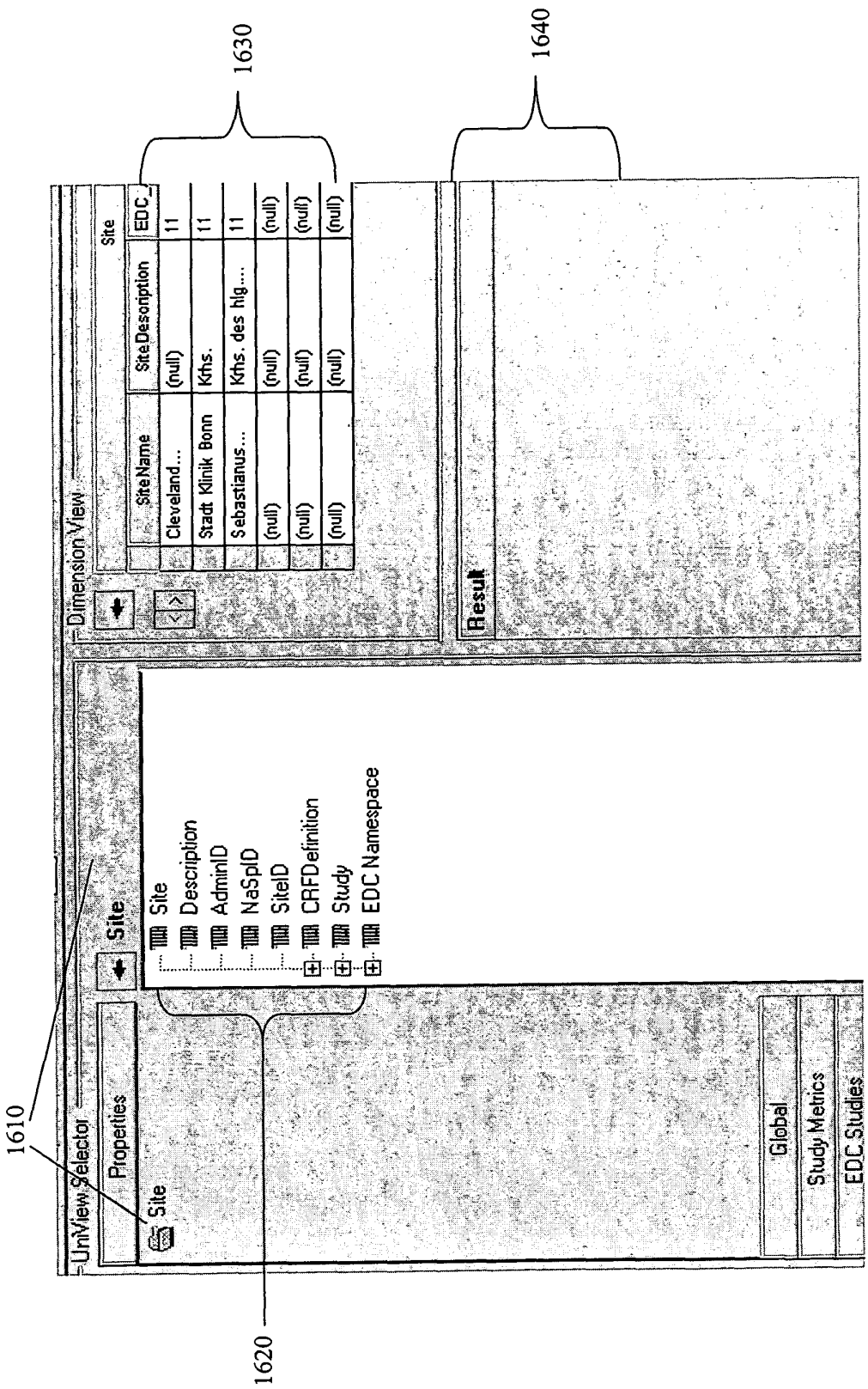
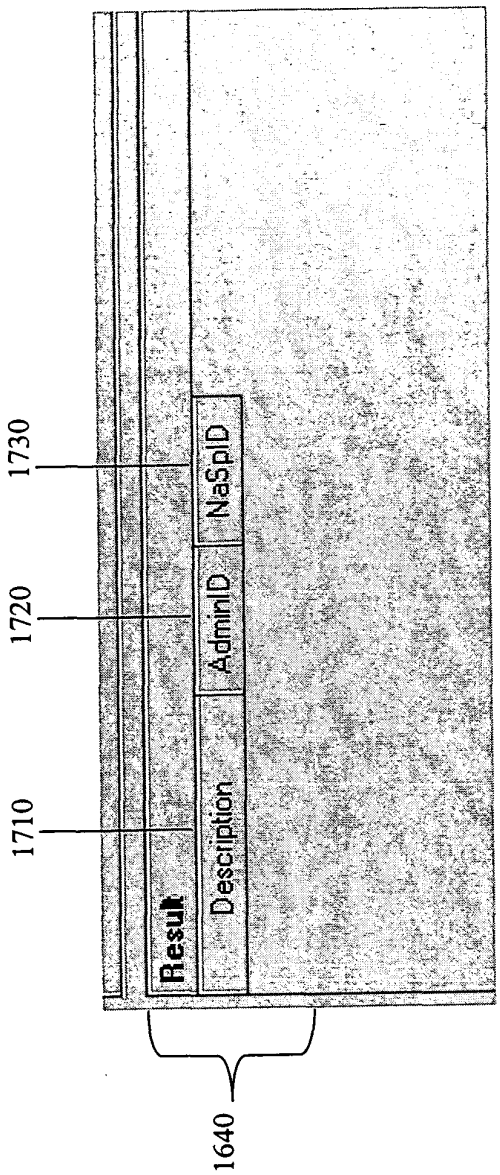

1630
1640
Dimension View
Site
EDC
SiteName
SiteDescription
Cleveland...
(null)
11
Stadt Klinik Bonn
Khs.
11
Sebastianus...
Khs. des hlg....
11
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
Result
UnView Selector
Properties
Site
Site
Description
AdminID
NaSpID
SiteID
CRFDefinition
Study
EDC Namespace
Global
Study Metrics
EDC Studies
1610
1620

Fig. 16

Fig. 17



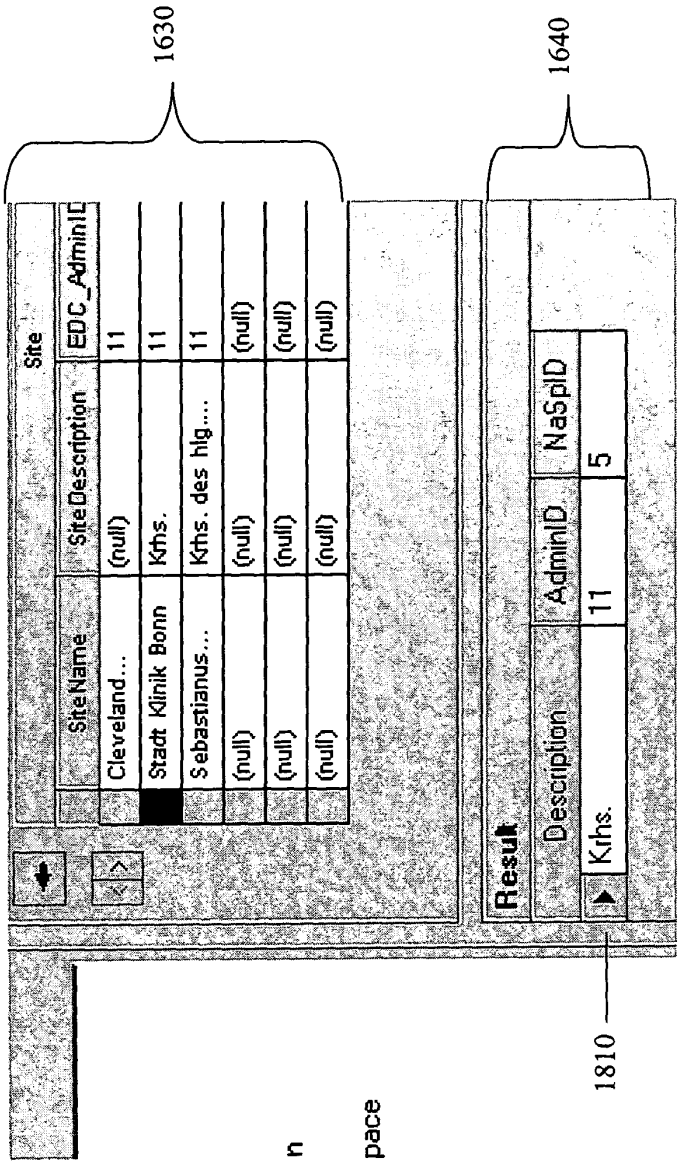
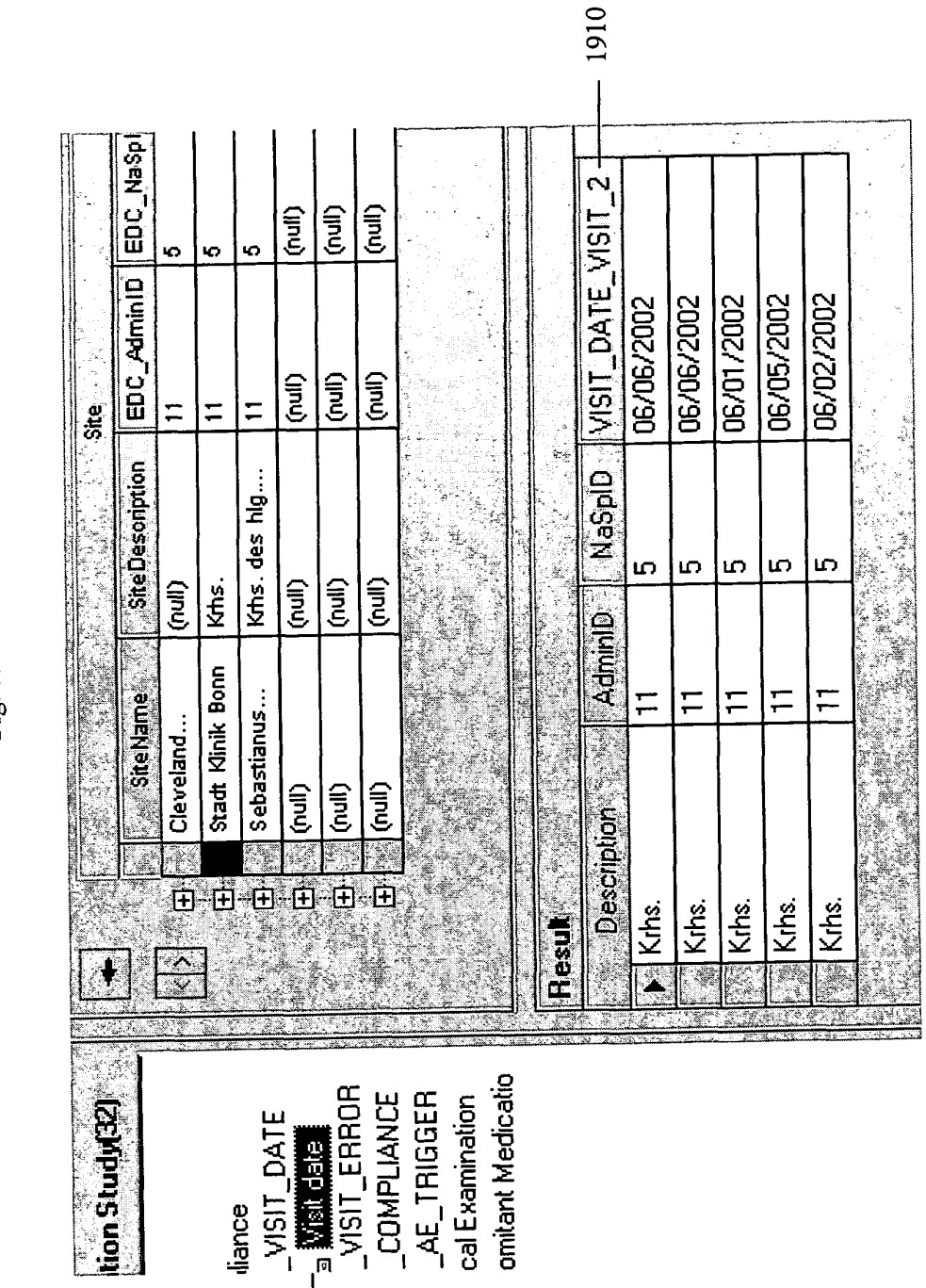

1630
1640
Site
SiteName
SiteDescription
EDC_AdminID
Cleveland...
(null)
11
Stadt Klinik Bonn
Khs.
11
Sebastianus...
Khs. des hlg....
11
(null)
(null)
11
(null)
(null)
11
(null)
(null)
11
Result
Description
AdminID
NaSplD
Khs.
11
5
1810
n
pace

Fig. 18

Fig. 19


1910
1920
tion Study[32]
liance
_VISIT_DATE
Visit date
_VISIT_ERROR
_COMPLIANCE
_AE_TRIGGER
cal Examination
omitant Medicatio
Site
SiteName
SiteDescription
EDC_AdminID
EDC_NaSpl
Cleveland...
(null)
11
5
Stadt Klinik Bonn
Krhs.
11
5
Sebastianus...
Krhs. des hlg....
11
5
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
(null)
Result
Description
AdminID
NaSplD
VISIT_DATE_VISIT_2
Krhs.
11
5
06/06/2002
Krhs.
11
5
06/06/2002
Krhs.
11
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06/01/2002
Krhs.
11
5
06/05/2002
Krhs.
11
5
06/02/2002

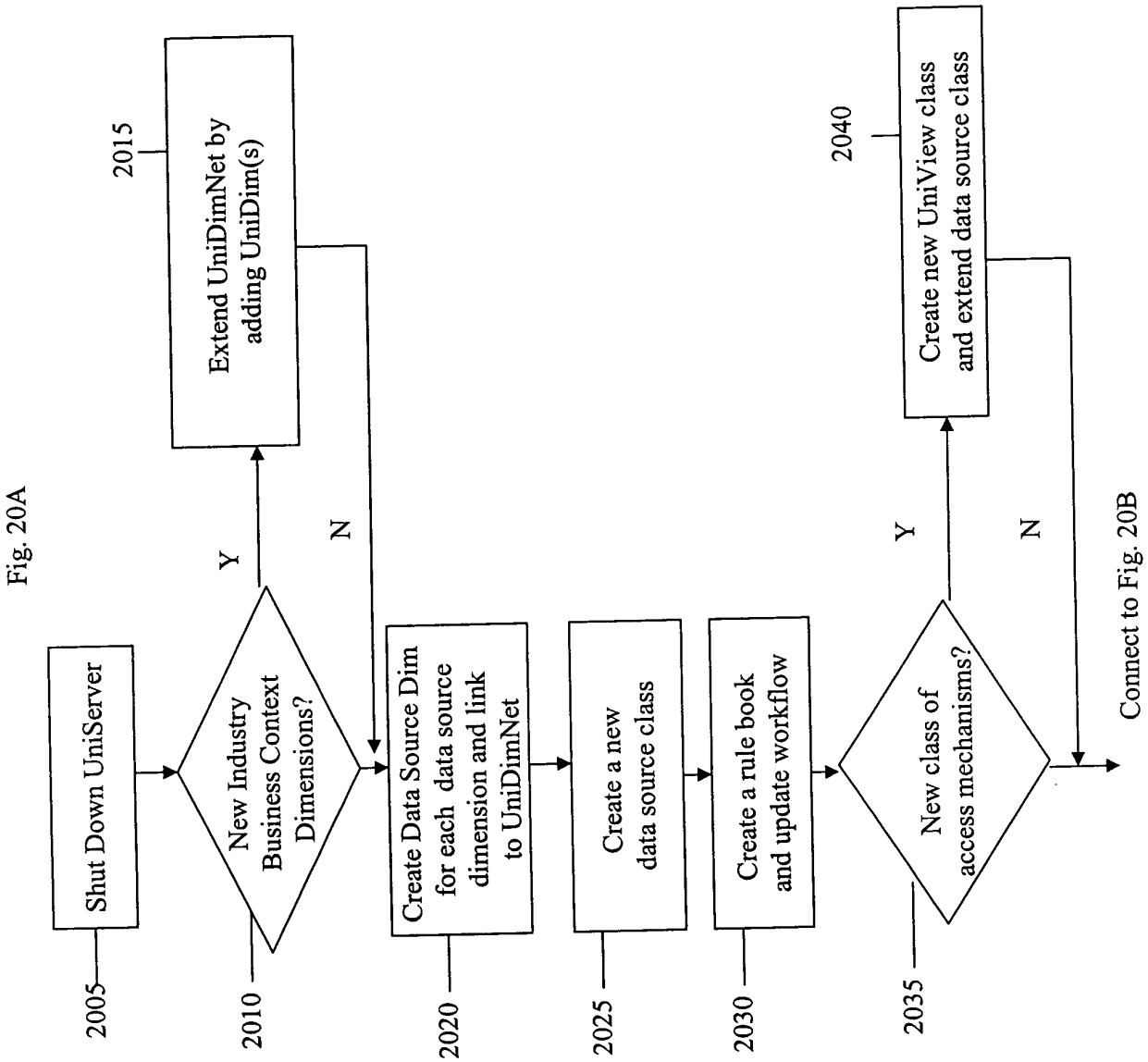

Shut Down UniServer
2005
New Industry Business Context Dimensions?
2010
Y
Extend UniDimNet by adding UniDim(s)
2015
N
Create Data Source Dim for each data source dimension and link to UniDimNet
2020
Create a new data source class
2025
Create a rule book and update workflow
2030
New class of access mechanisms?
2035
Y
Create new UniView class and extend data source class
2040
N
Connect to Fig. 20B

Fig. 20A

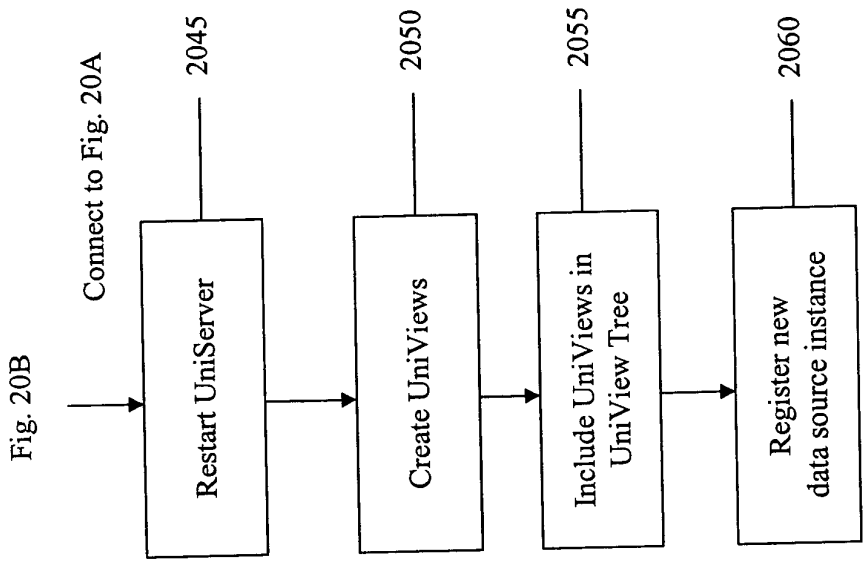
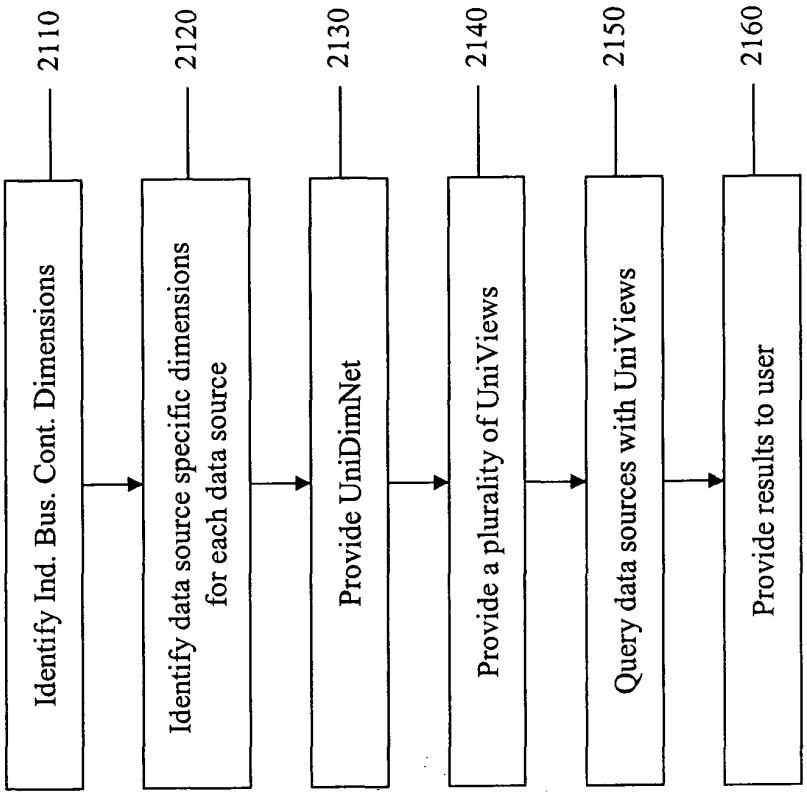

Connect to Fig. 20A
2045
Restart UniServer
2050
Create UniViews
2055
Include UniViews in UniView Tree
2060
Register new data source instance

Fig. 20B

Fig. 21


2110
Identify Ind. Bus. Cont. Dimensions
2120
Identify data source specific dimensions for each data source
2130
Provide UniDimNet
2140
Provide a plurality of UniViews
2150
Query data sources with UniViews
2160
Provide results to user

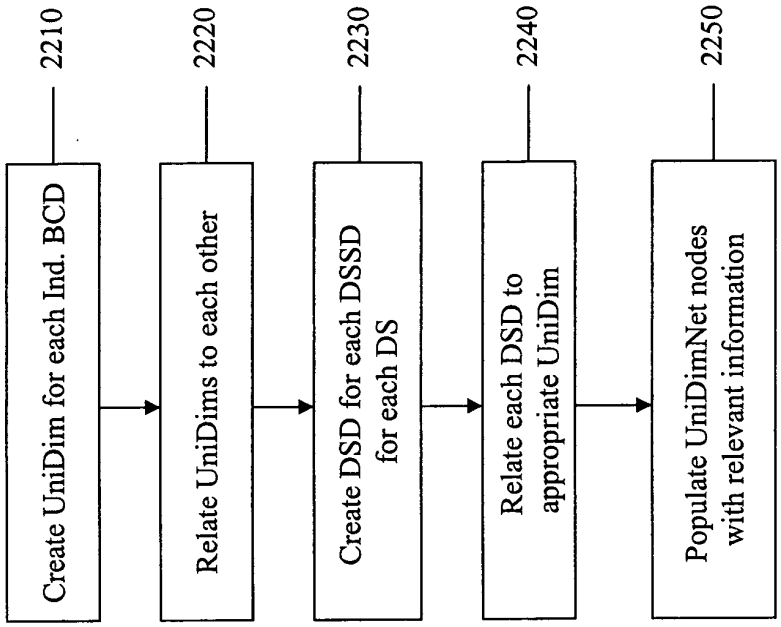

2210
Create UniDim for each Ind. BCD
2220
Relate UniDims to each other
2230
Create DSD for each DSSD for each DS
2240
Relate each DSD to appropriate UniDim
2250
Populate UniDimNet nodes with relevant information

Fig. 22